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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,129	10/31/2001	Jay H. Connelly	42390P13399	2646
59796	7590	06/26/2007		
INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER RUHL, DENNIS WILLIAM	
			ART UNIT 3629	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/002,129	CONNELLY, JAY H.	
	Examiner	Art Unit	
	Dennis Ruhl	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/8/07 has been entered.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to the independent claims 1,13,20,26,30,34,38,42,46, it is not clear what kind of information is considered to be "consumer information linked to billing information associated with a set top box" as has been added to these claims by amendment. What kind of information is this supposed to be claiming? This language seems like it could possibly include any kind of information, depending on what is meant by "linked with billing information". One wishing to avoid infringement would not know what kind of information is within the scope of these claims and would not be able to determine under what conditions infringement may or may not occur. The examiner feels that this language is just so broad that it is indefinite. The language that one kind of data is linked to other data, that is associated with the set top box is supposed to

define what kind of data? This is not clear. The claims have been examined as they are best understood.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6,11,13-49, are rejected under 35 U.S.C. 102(e) as being anticipated by Schaffer et al. (6934964).

For claims 1,13,20,26,30,34,38,42,46, Schaffer disclose a method and computer system where user preferences are obtained concerning television programs, or books or web sites, etc., and recommendations are made to the user based on the user preferences. The obtaining of a plurality of consumer preferences is disclosed numerous times in the patent, as an example see column 5, lines 1-19, as well as the background of the invention portion. Also see column 3, line 45 to end of column 4.

With respect to the language reciting that the preferences are determined at least in part by consumer information, this is present in Schaffer. The information that the system tracks and acquires about the viewing habits of a user satisfies what is claimed. This is consumer information because it is information about the user and what they like or dislike. This consumer data is linked to billing information associated with a set top box,

because both sets of data are for the name of the person who owns or pays for the set top box. In Schaffer, consumer data is collected by the set top box and preferences are determined based on that data. That consumer data that is collected is linked to billing information because that data is reflective of the preferences of the person that pays the bills for the set top box. Additionally, reciting that the preferences are determined based on consumer data (broad term itself), that is linked to billing information (another broad term itself), is not seen as reciting any specific kind of data that is being used. The receiving a schedule from a server listing available products is disclosed in column 9, lines 47-58. It is disclosed that computer 240 (a set top box) receives program information via a data link 260. The data comes from a server as claimed and includes programs currently running and ones coming up. The creation of an ordered list is disclosed in column 5, lines 49-53. The preference engine displays a list of recommended programs. The list of recommended programs is inherently in an order, as a list necessarily has to have some order to it. Also, it is disclosed in column 4, lines 65-67, that the programs receive a ranking of how much the user likes the program. The programs are ranked based on the relevance to the user and their preferences. For the recited structure to the system (claim 26) see figure 4, which shows a user input device 210, television monitor 230, set top box 240. The set top box inherently has a processor, one is necessarily required for the set top box to operate. The memory is 235, communication interface 260, output controller (the control of the signal to the television monitor, i.e. video out), user input controller 215.

For claims 2,14,15,21,22,27,31,35,39,43,47, the preferences include both implicit and explicit. The implicit preferences are referred to as the 1st type (disclosed in column 2), and the explicit are referred to as the 2nd type (disclosed in column 2). Also, Schaffer discloses that the computer 240 can be preloaded with user preference information and that the system will also monitor the viewing habits of the user to augment the preferences with historical data relating to what the user watched. For example, see column 5, lines 1-19 and column 9, lines 54-57.

For claims 3,16, see column 6, lines 37-48; column 10, lines 10-13; and column 14, lines 56-67, where the claimed limitations are disclosed.

For claims 4,17,23,28,32,36,40,44,48, see column 5, lines 49-53 where the claimed limitations are disclosed.

For claims 5,18,24, see column 9, lines 1-28, where the claimed limitation is disclosed.

For claims 6,11,19,25,29,33,37,41,45,49, Schaffer discloses what is claimed. The ratings vectors are the rankings assigned to various programs, such as is disclosed in column 4, lines 65-67. Having rankings based on numbers satisfies ratings vectors. The predictive vectors are the results that the predictive engine comes up with to base the recommendations on. Each program is rated based on the preferences and a prediction is made to whether or not the user will like the program, and some predicted programs are rated higher than others. This satisfies the claimed "predictive vectors". The ordering of the products is satisfied by the user selecting a recommended program

that they desire to view. The product description data is inherently used as claimed because this is what defines the content of the program.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-10,12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffer et al. (6934964) in view of Ismail et al. (6614987).

For claims 7-10,12, not disclosed is that a reference magnitude and a preference magnitude are evaluated and that a standard deviation is determined for key/value pairs. In Schaffer at column 6, lines 3-14 it is disclosed that the manner of determining preferences/recommendations can be done by any of numerous types of pattern-discovery techniques. Schaffer is disclosing that the methodology used to determine preferences and make recommendations can be varied. Ismail discloses a technique for determining user television viewing preferences and for making recommendations to the user. Ismail is very similar to Schaffer in that both are using user preferences to make recommendations of programs to users. Ismail discloses that for each program there are category-value pairs (the claimed key/value pairs) that are used to determine a rating for each program (a reference magnitude). This is then compared to user preferences (a preference magnitude) to determine a recommendation rating (ranking/relevance/sorting) for the programs. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to use the technique of Ismail in the system and method of Schaffer, to determine key/value pairs and to evaluate reference and preference magnitudes so that accurate recommendations can be obtained. With respect to the use of standard deviation, this is not taught explicitly; however, the use of standard deviation (statistical analysis) in analyzing collections of data is very old and very well known in the art. One of ordinary skill in the art at the time the invention was made would have found it obvious to use the well known statistical analysis technique of standard deviation to determine how some of the data varies from what was expected.

8. Applicant's arguments with respect to claims 1-49 have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 571-272-6808. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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